

Work Order ID 133916

133916

Page 1

Tuesday, June 23, 2015 3:14:46 PM

Item ID: D3564-5 Accept *N900040100* Setup Start *NS1*

Revision ID: Stop *NS2*

Item Name: Wearplate Center

Start Date: 6/23/15 Start Qty: 6.00 *6* Cust Item ID:

Required Date: 6/23/15 Req'd Qty: 6.00 *6* Customer:

Reference:

Approvals: Process Plan: MLJ Date: JUN 24 2015 Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start *NR1*

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3564	Rev D

100 FLOW WATER JET 0.00

100

Waterjet

FLOW CNC Waterjet

304-063

Memo

1-Cut as per Dwg D3564 Dwg Rev: 0 Prog Rev: 0 2-

Deburr if necessary

6 0 Jm15-6-25

110 QC2- Inspect parts off machine FAI/FAIB 0.00

110

QC

Quality Control

Memo

6 0 Jm15-6-25

120 QC8- Inspect parts - second check 0.00

120

QC

Quality Control

Memo

6 0

DAS 38

JUN 25 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER : ☐					

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 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Brake NC Brake NC	NC BRAKE Memo Deburr if necessary Form on Brake as per Dwg D3564 using Jigs DT8179 and DT8155 Form Joggle as per Dwg D3564 on brake using Jig DT8157	0.00 0.00			DAS 30 9-89	6			JUL 02 2015 DAS 36 9-89
140 *140* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo Ensure joggle as per dwg D3429	0.00 0.00				6			68-8 38 DAS JUL 03 2015
150 *150* Powdercoat Powder Coating	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3 M 131746. Memo START TIME: 2:15 FINISH TIME: 2:45. OVEN TEMPERATURE:	0.00 0.00				6	15-7-13		DAS 34 9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

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 Item Name: Wearplate Center
 Start Date: 6/23/15 Start Qty: 6.00 *6* Cust Item ID:
 Required Date: 6/23/15 Req'd Qty: 6.00 *6* Customer:
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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start *NR1*
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160	QC3- Inspect Part Finish	0.00							DAS
160									9
QC	Memo	0.00							9-89
Quality Control									
170	Identify as per dwg & Stock Location: <u>EP-002</u>	0.00							
170									
Packaging	Memo	0.00							
Packaging	LOCATION : FP 002								
180	QC21- Final Inspection - Work Order Release	0.00							
180									
QC	Memo	0.01							
Quality Control									

ML5 JUL 15 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QS1042) Approval		
Description Work Order Deviation				Disposition				Completed By	
								Lead hand / Supervisor Approval Verification	
								QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
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Past Expiry Date ☐	Manufacturing Process ☐								
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Picklist Print

Tuesday, June 23, 2015 3:14:46 PM

Work Order ID: 133916

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Parent Item: D3564-5

D3564-5

Parent Item Name: Wearplate Center

Start Date: 6/23/15

Required Date: 6/23/15

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A New Issue 07-03-08 ec
IPP Rev:B As per Rev C 07-07-09 JLM
IPP Rev:C As per Rev D 07-09-09 JLM Verified By:EC
IPP Rev D added DT# 08.04.21 DD Verified by EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
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M304S16GA

Purchased

No

100

sf

229.3076

1.5

10

M304S16GA

**

Jm 15-6-25

304/316 Sheet .063

Location

Loc Qty

Loc Code

MAT019

229.3076

m131384

95.0176

m131503

134.29

131503

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DART AEROSPACE LTD		Work Order: 133916
Description: Wearshoe		Part Number: D3564-5
Inspection Dwg: D3564	Rev: D	Page 1 of 1

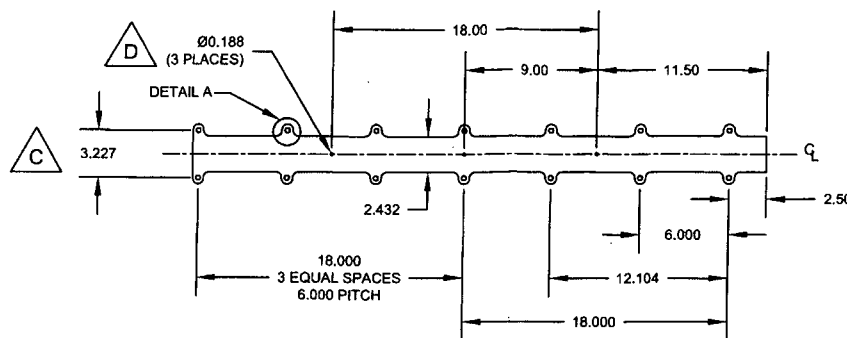
FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

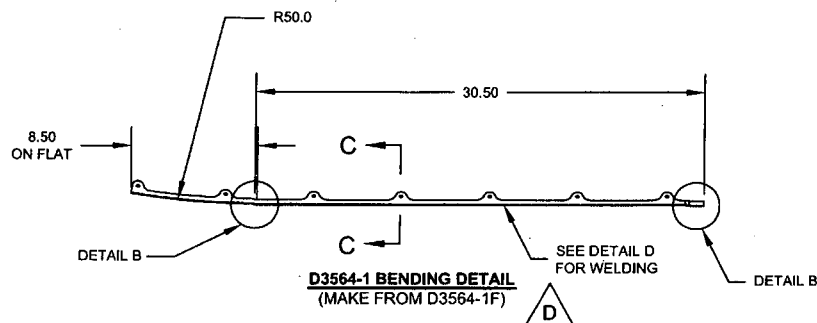
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
43.50	+/-0.030	43.50"	-		T	Jm
6.75	+/-0.030	6.75	-		V	Jm
10.00	+/-0.030	10.00"	-		T	J
20.00	+/-0.030	20.00"	-		T	
30.00	+/-0.030	30.00"	-		T	
2.50	+/-0.030	2.50"	-		V	
3.227	+/-0.010	3.227"	-		V	
38.500	+/-0.010	38.500"	-		T	
5.500	+/-0.010	5.500"	-		V	
2.50	+/-0.030	2.50"	-		V	
2.432	+/-0.010	2.432"	-		V	
0.300 x 0.300	+/-0.010	0.300 x 0.300"	-		V	
Ø0.188	+0.005/-0.001	0.190"	-		V	
R0.375	+/-0.010	0.375"	-		RG	
0.063	+/-0.010	0.050"	-		V	

Measured by: Jm	Audited by: DAS 38	Prototype Approval:	N/A
Date: 15-6-25	Date: JUN 25 2015	Date:	N/A

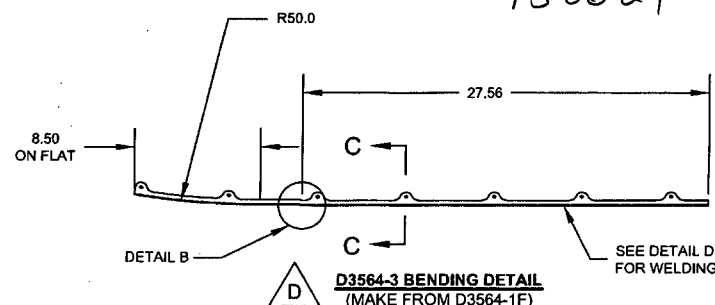
Rev	Date	Change	Revised by	Approved
A	08.01.16	New Issue	KJ/EC/DD	



D3564-1F FLAT PATTERN



D3564-1 BENDING DETAIL
(MAKE FROM D3564-1F)



D3564-3 BENDING DETAIL
(MAKE FROM D3564-1F)

STOP COPY
RETURN TO
ENGINEERING
FOR REWORKED COPY
WORK IN PROGRESS
NO. 1339.16 M.C.S
15-06-24

RELEASED

07.09.04

UNDER REVIEW

First change
OK 9/11/12

D3564-1/-3/-5/-7/-9/-11/-13/-15 WEARPLATE NOTES:

- 1) MATERIAL: AISI 304/316 SS SHEET PER AMS 5513 OR AMS 5524, 16 GAUGE (0.063 THICK)
(REF DART MATERIAL SPEC M304S16GA)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF 4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: SEE TABLE IN ZONE A3
- 8) WELD PER DART QSI 004
- 9) SEE PG 3 FOR SECTIONS AND DETAILS
- 10) PARTS ARE SYMMETRIC ABOUT Q

WEIGHTS:

D3564-1	1.85 lbs
D3564-3	1.85 lbs
D3564-5	1.93 lbs
D3564-7	1.26 lbs
D3564-9	1.85 lbs
D3564-11	1.85 lbs
D3564-13	0.38 lbs
D3564-15	0.80 lbs

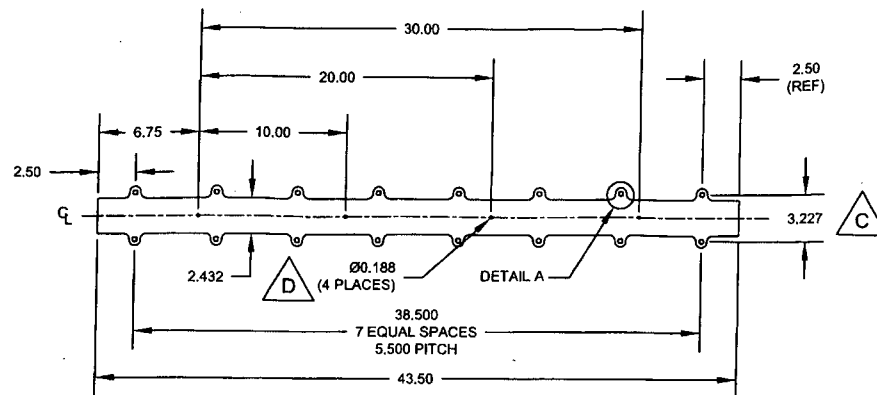
D	UPDATE DRAWING TEMPLATE: CHANGE ALL (TYP X PLS) TO (X PLACES); PG1 A8: UPDATE NOTES; PG1 A8, PG3 B5,C5: ADD D3564-15; PG1 B6,B3: D3564-1/-3 WAS ONE FIGURE; PG2 A7,A3: D3564-9/-11 WAS ONE FIGURE; PG2 A7,A3: D3564-9/-11 WAS ON PG1; PG3 B8,C8: D3564-13 WAS ON PG2; PG3 D2: WELDING DETAIL WAS ON PG1 PG3 A5.7,B2: RELOCATE DETAILS AND SECTION; PG3 A5.7,B2: INCREASE DETAIL AND SECTION SIZE	CB	07.08.21
C	MOVE TAB OUTBOARD, DETAIL A	PH	07.04.17
B	ADD AMS 5513 AND AMS 5524	PH	07.03.20
A	NEW ISSUE	PH	06.12.18
REV.	DESCRIPTION	BY	DATE
DESIGN	PH		
DRAWN	CB		
CHECKED	PH		
MFG. APPR.	PH		
APPROVED	PH		
DE APPR.	PH		
DATE	07.08.21		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

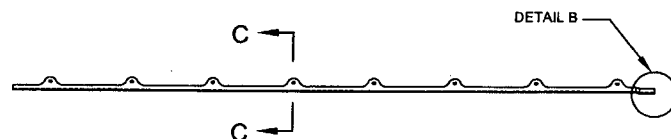
DRAWING NO. REV. D
D3564 SHEET 1 OF 3
TITLE SCALE
WEARSHOE 1:8

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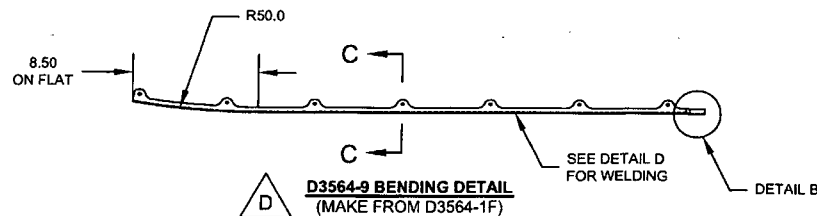
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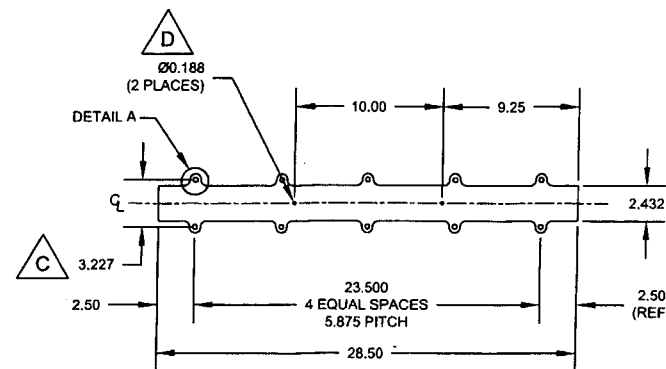
D3564-5F FLAT PATTERN



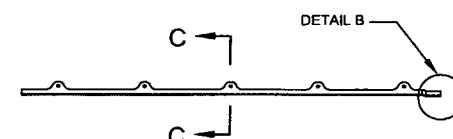
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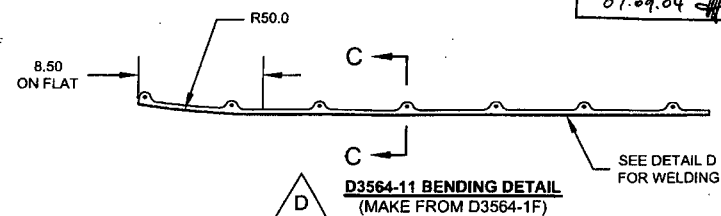
D3564-9 BENDING DETAIL
(MAKE FROM D3564-1F)



D3564-7F FLAT PATTERN



D3564-7 BENDING DETAIL
(MAKE D3564-7 FROM D3564-7F)



D3564-11 BENDING DETAIL
(MAKE FROM D3564-1F)

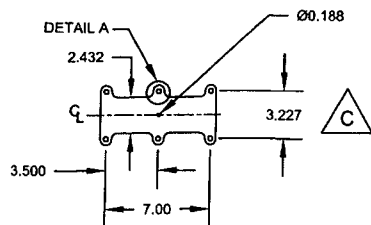
UNDER REVIEW
OK 07.11.28

RELEASED
07.09.04

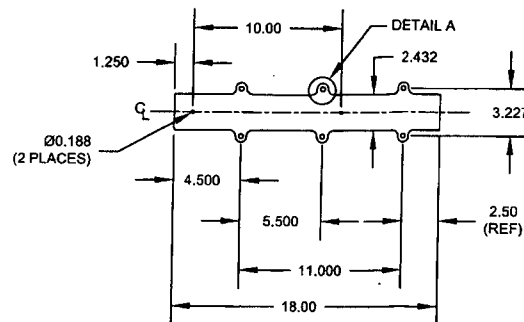
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DRAWN	CB		
CHECKED	PH	DRAWING NO.	REV. D
MFG. APPR.	PH	D3564	SHEET 2 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE	1:8
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8 7 6 5 4 3 2 1

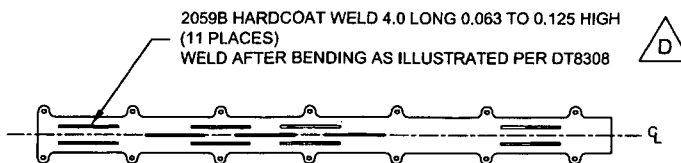
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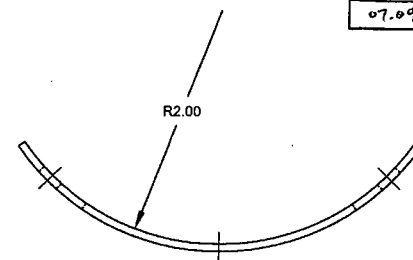
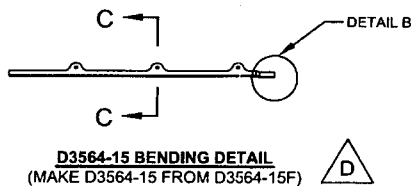
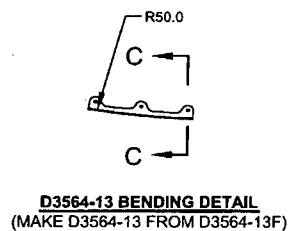
D3564-13F FLAT PATTERN



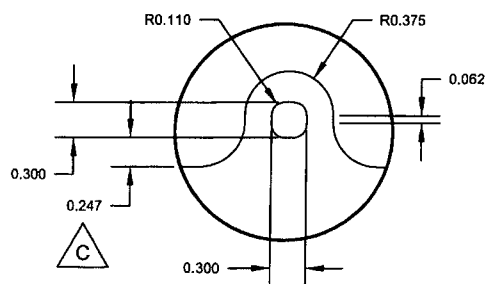
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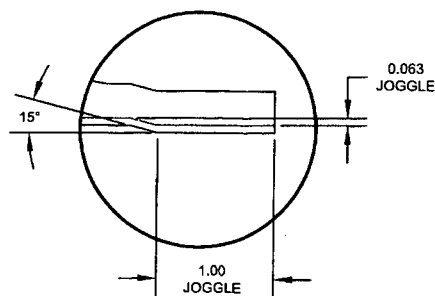
DETAIL D
(D3564-1/-3/-9/-11 WELDING DETAIL)



SECTION C-C
SCALE 1:1



DETAIL A
SCALE 1:1



DETAIL B
SCALE 1:1

RELEASED

07.09.04

UNDER REVIEW
OK 07.11.28

DESIGN	PH	DART AEROSPACE LTD	
DRAWN	CB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	PH	DRAWING NO.	REV. D
MFG. APPR.	PH	D3564	SHEET 3 OF 3
APPROVED	PH	TITLE	SCALE
DE APPR.	PH	WEARSHOE	1:8
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8 7 6 5 4 3 2 1